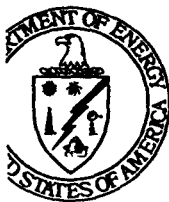


CORRES CONTROL  
INCOMING LTR NO

01359 RF 97

DUE DATE  
ACTION

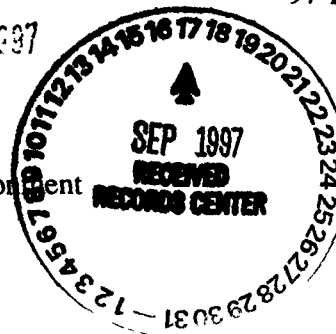


12 SEP 97  
RECEIVED  
Department of Energy

ROCKY FLATS FIELD OFFICE  
P.O. BOX 928  
GOLDEN, COLORADO 80402 0928

97-DOE-05388

SEP 11 1997



Mr Steve Tarlton  
RFCA Project Coordinator  
Colorado Department of Public Health and the Environment  
4300 Cherry Creek Drive South, OE-B2  
Denver, CO 80222-1530

Dear Steve,

The purpose of this letter is to provide responses to your comments, dated August 5, 1997, on the "Plan for Source Evaluation and Preliminary Proposed Mitigating Actions for Walnut Creek Water Quality Results for April 1997" (the Plan). A revised Plan will be submitted to you on September 15, 1997. It is the Department of Energy's (DOE's) position that the reported maximum 30-day average for GS03 in April 1996, 0.086 pCi/L, does not represent an exceedance of a Rocky Flats Cleanup Agreement (RFCA) standard at a RFCA Point of Compliance. However, we do believe that these elevated values warrant a source evaluation, and thus they were included in the Plan.

In response to your general comments, DOE has the following responses. The revised Plan will provide additional detail on activities which will be conducted for source identification and actions which may be undertaken if a source is identified. However, this may not be possible if the plutonium source is not "discrete" but due to low-level, wide-spread contamination. In addition, part the FY98 and FY99 work of the Actinide Migration Studies will include evaluation of the sources and transport pathways and mechanisms in the Walnut Creek drainage. The response to your specific comments are provided below.

The following comments/items were requested by September 30, 1997.

**Comment 1. Provide a complete data review, to include flow, Pu and Am concentrations (in pCi/L and pGm/L) for filtered and unfiltered results, TSS, loading in micrograms per event or season/year for each event for each station in Walnut Creek drainage.**

The revised Plan will include data for both monitoring locations GS03 and GS10, and the requested additional data will be submitted to you by September 30, 1997. Assessment for GS03 will include GS11 and GS08. Assessment for GS10 will include SW022, GS28, and GS27. Data from new monitoring locations to be installed in the sub-drainages will also be used for analysis once data are collected and available.

**Comment 2. Provide the summary descriptive statistics for each of the metrics in #1 above.**

The requested summary statistics for the items discussed in Comment 1 above will be submitted to you by September 30, 1997.

**Comment 3. Provide the gains/losses in micrograms and percentage of upstream load, for each significant reach. Compare the April exceedances to the historic record.**

DIST	LTR	ENC
BACON, R.F.		
BENSUSSEN, S.J.		
BORMOLINI, A.M.		
BRILSFORD, M.D.		
BUHL, T.R.		
BURDGE, L.		
CARD, R.G.		
COSGROVE, M.M.		
COULTER, W.L.		
CRAWFORD, A.C.		
DERBY, S.		
DIETERLE, S.E.		
FERRERA, D.W.		
GERMAN, A.I.		
HARDING, W.A.		
HARROUN, W.P.		
HEDDAHL, T.G.		
HERRING, C.L.		
HILL, J.A.	X	
MARTINEZ, L.A.		
NORTH, K.		
OGG, R.N.		
PARKER, A.		
PHILLIPS, F.J.	X	
RHOADES, D.W.		
RUSCITTO, D.G.		
SANDLIN, N.B.		
SPEARS, M.S.		
TILLER, R.E.		
TUOR, N.R.		
VOORHEIS, G.M.		
Shelton, D.	X	
Seftick, G.	X	

COR CONTROL	X	X
ADMIN RECORD	X	
PATS/T130G		

Reviewed for Addressee  
Corres Control RFP

9-12-97 DG  
Date By

Ref Ltr #

DOE ORDER #

ADMIN RECORD

A-UU06-000534

SEP 11 1997

The gains/losses information will be submitted to you by September 30, 1997. A comparison of the April data to other data from this fiscal year will be conducted, but a comparison to data collected prior to that cannot be completed since the sampling methodology was different. However, all information will be considered during the source investigation.

**Comment 4. Include details of proposed new monitoring locations upgradient of GS10.**

For GS03, a monitoring location will be installed for both the No Name Gulch and McKay Ditch sub-drainages. In addition, one to two locations will be installed on Walnut Creek between the Terminal Ponds and GS03. The exact locations will be determined after the results of the August 21, 1997 sediment sampling event have been reviewed. For GS10, two or three monitoring locations will be installed upgradient to further delineate the basin. These locations will be chosen based on engineering judgment, a review of historical data, and the hydrologic applicability of locations for adequate water quality and discharge data collection.

**Comment 5. From review of the data, determine if there is a possible correlation with specific characteristics of the flow events, such as time of year, duration, intensity of storm event.**

The Site will evaluate trends using existing data that may indicate source location and behavior that can be reasonably completed by September 30, 1997. An extensive analysis would be beyond the scope of initial source evaluations and would require additional resources and collection of additional data, therefore, such an analysis cannot reasonably be completed within this time frame. Analysis of all of the variables affecting water quality is difficult due to the variability of environmental conditions within the drainage.

**Comment 6. Discuss the recent change from rising-limb sampling and the current volume weighted compositing method of sampling, and how this sampling change affects the results of the analyses.**

A discussion of the impacts of changing the sampling methodology will be submitted to you by September 30, 1997.

**The following comments/items were requested by December 31, 1997.**

**Comment 1. From the data evaluation, determine whether a source can be identified and quantified, which produced the exceedance at GS10.**

The objective of the Source Evaluation Plan is to identify a potential source if possible. This will be difficult if the source is not "discrete" but due to low-level, wide-spread contamination. In addition, part the FY98 and FY99 work of the Actinide Migration Studies will include evaluation of the sources and transport pathways and mechanisms in the Walnut Creek drainage.

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**Comment 2. Identify and quantify any downstream affect from this source**

The downstream effects of a potential source will be evaluated by December 31, 1997. Further discussions about this may be warranted since the water was routed through the Broomfield Diversion Ditch, making it difficult, if not impossible, to locate a downstream receptor and quantify the effect(s) of the limited duration higher values.

**Comment 3. Evaluate/quantify what affects the recent watershed improvements could have had on this exceedance**

A discussion of the effect of watershed improvements on surface water quality will be submitted to you by December 31, 1997.

**Comment 4. Identify data gaps and uncertainties in this process of source identification. Describe any modifications that should be made to the actinide migration workplan and/or the present site monitoring plan so that proper evaluations can be conducted.**

A discussion of the data gaps and uncertainties will be included in the revised Plan. Changes may be proposed to the Integrated Monitoring Plan during its annual review cycle on the issue of continuous versus storm-event sampling, continuous sampling may be better for transport analysis, but we cannot collect samples for total suspended solids (TSS) due to holding time constraints. TSS results would be useful to develop water quality correlations and to judge performance of the watershed improvements. The FY98 and FY99 scope of work for the Actinide Migration Studies includes analysis of the sources and transport pathways and mechanisms in the Walnut Creek drainage.

Please feel free to contact me if you have any questions or require additional information regarding these responses.

Sincerely,



Steven W Slaten  
RFCA Coordinator

cc  
T Rehder, EPA  
K Schnorr, City of Broomfield  
M Harlow, City of Westminster  
J Legare, AMEC, RFFO  
B April, RLG, RFFO  
J Stover, RLG, RFFO  
D Shelton, K-H  
G Setlock, K-H  
Administrative Record